

Littoral Combatant Ship (LCS)

Envisioned as a networked, agile, stealthy surface combatant capable of defeating asymmetric threats in the littorals and ensuring U.S. forces access to those regions of the world, the Littoral Combat Ship (LCS) will be a relatively small, high-speed, and maneuverable combatant. The Navy expects it to complement the Aegis Fleet, DD(X), and CG(X) by operating in environments where it is less desirable to employ larger, multi-mission ships. It is expected to be able to deploy independently, remain on station for long periods of time, operate with a strike group or through a forward-basing arrangement, and conduct underway replenishment.

The LCS will likely be an advanced hull form employing open software architecture to integrate different combat systems, or mission packages, depending on its assigned mission. It is expected to be rapidly reconfigurable in response to changes in mission, threat, and technology. Each mission package will rely heavily on manned and unmanned vehicles to execute assigned missions.

The LCS will have three primary or focused missions: surface warfare against small hostile boats; mine countermeasures; and littoral anti-submarine warfare. It will only be capable of conducting one focused mission at a time. Likely secondary missions include: intelligence; surveillance and reconnaissance; Special Operations Forces support; logistic support for movement of personnel and materials; Maritime Intercept Operations; and Homeland Defense. A spiral development approach is planned to meet accelerated production and deployment goals. The first ship is scheduled for delivery in FY07. The initial two ships, comprising Flight 0, will deliver a set of core warfighting capabilities that must include self-defense and core command and control capabilities. Flight 0 will also produce a limited set of mission modules based on current or near-term systems. While Flight 0 ships and mission packages are being built, the Flight 1 ship and mission package designs will be developed.

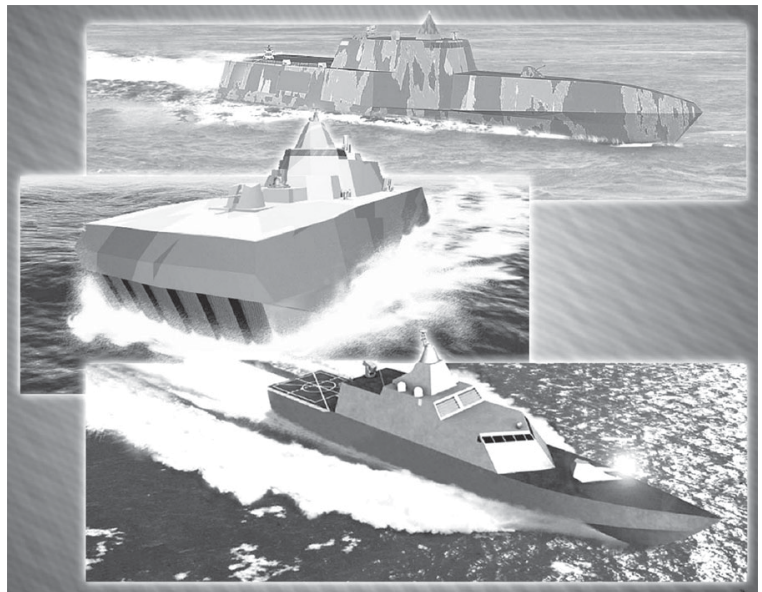
TEST & EVALUATION ACTIVITY

Although still very early in the LCS program, the Program Office developed a Flight 0 Interim Requirements Document and promulgated it with the Preliminary Design Request for Proposal. Additionally, DOT&E has been active in the development of both the Acquisition Strategy and Test and Evaluation Strategy documents, which are due at Milestone A.

TEST & EVALUATION ASSESSMENT

The accelerated acquisition timeline for LCS leaves very little time to apply any lessons learned from the construction/operational testing of Flight 0 ships to Flight 1 hull and mission package designs. The two Flight 0 hulls will likely be different designs and their construction schedules will overlap. Hull #1 will be delivered approximately nine months prior to hull #2. The final design of hull #3, the first Flight 1 ship, will start a few months after delivery of hull #1 and prior to the delivery of hull #2.

The Program Office, the operational test agency, and DOT&E have reduced program risk through early planning and good liaison. Several early operational assessments on each of the different hulls and mission packages are planned. A LFT&E program is planned, although many details remain to be worked out before the LFT&E Management Plan can be approved.



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NAVY PROGRAMS

Operational effectiveness determination of LCS self-defense in the littoral environment against the anti-ship cruise missile threat will be required. The program should plan on using a self-defense test ship, as that is the only way to conduct safe and adequately realistic operational testing. An instrumented shallow water range will be required to fully evaluate LCS's anti-surface warfare capability and would be very beneficial to evaluate its mine warfare capability. Threat representative targets will also be critical to evaluate LCS's effectiveness against the diesel submarine threat in shallow water.